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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/066,756	02/06/2002	Tatsuaki Osafune	HITA.0157	4765

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EXAMINER	
SCUDERI, PHILIP S	

ART UNIT	PAPER NUMBER
2153	

DATE MAILED: 05/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/066,756	OSAFUNE ET AL.	
	Examiner	Art Unit	
	Philip S. Scuderi	2153	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 February 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6 and 11-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6 and 11-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

This Office action is in response to applicant's amendment filed on 21 February 2006.

Claim Rejections - 35 USC § 112

The rejections under 35 USC 112, first paragraph have been withdrawn because applicant's amendments have overcome the rejections. However, the following rejections apply to the amended claims.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2, 4, and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 recites the limitation "the network" in lines 7 and 9. Parent claim 1 now introduces a public switched telephone network and an IP network. It is unclear which network the limitation refers to. The examiner's best understanding is that applicant meant the limitation to refer to the IP network and the claim will be treated accordingly.

Claim 4 recites the limitation "the network" in line 2. Parent claim 1 now introduces a public switched telephone network and an IP network. It is unclear which network the limitation refers to. The examiner's best understanding is that applicant meant the limitation to refer to the IP network and the claim will be treated accordingly.

Claim 14 recites the limitation "the network" in line 2. Parent claim 6 now introduces a public switched telephone network and an IP network. It is unclear which network the limitation

refers to. The examiner's best understanding is that applicant meant the limitation to refer to the IP network and the claim will be treated accordingly.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-6 and 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,490,289 to Zhang et al. ("Zhang") in view of Applicant Admitted Prior Art ("AAPA"), and U.S. Patent No. 6,938,158 to Azuma ("Azuma").

Regarding claim 6, Zhang teaches an address translation apparatus (figure 5, 154) connected to an IP network (whatever network links node 154 to 158 and node 154 to 162 must be an IP network because sessions 156 and 160 can carry IP packets; figures 5 and 8; column 5, lines 15-21; column 6, lines 1-2) which is connected to plural Internet service providers (ISPs) (networks 158 and 162; figure 5), comprising:

a part which sends an assigned private network address to a user (a virtual network address; column 5, lines 56-61) using a point-to-point protocol (column 5, lines 15-21);

a translating part which translates the private network address into a public IP network address assigned to said user computer by one of the Internet service providers (column 6, lines 20-28); and

an output part which outputs said public IP network address to said IP network (column 6, lines 20-28).

Zhang does not expressly disclose that whatever network links node 154 to 158 and node 154 to 162 comprises a second router. Nonetheless, routers were well known components of nearly any network and would be obvious to use in the instant case for any of the well known reasons that routers are used in the art (e.g., ensuring information doesn't go where it's not needed, ensuring that information reaches its intended destination, etc.).

Zhang does not expressly disclose that the address translation apparatus (figure 5, 154) is connected to via a first router to an access server in a local switch center and a public switched telephone network (PSTN), which is connected to plural user computers. Zhang merely teaches that users connect to ISP 154 via PPP connections and is silent regarding particular aspects of the PPP connections. An access server in a local switch center of a public switched telephone network was a well known means for providing access to a regional service provider. For example, AAPA teaches an access server in a local switch center of a public switched telephone network that provides access to a regional service provider (figure 1).

Given the teachings of AAPA and that Zhang is silent regarding particular aspects of the connections to ISP 154, it would have been obvious to one of ordinary skill in the art to connect to ISP 154 via an access server in a local switch center of a public switched telephone network.

AAPA's local IP network does not necessarily comprise the claimed first router. Nonetheless, routers were well known components of nearly any network and would be obvious to use in the instant case for any of the well known reasons that routers are used in the art (e.g., ensuring information doesn't go where it's not needed, ensuring that information reaches its intended destination, etc.).

Zhang does not disclose that the apparatus (figure 5, 154) authenticates users by using a private network user ID and a private network password to retrieve and send a corresponding ISP user ID and a corresponding ISP password to an ISP contracted to provide internet services to the user so as to authenticate the user by the ISP. However, it was well known in the art that service providers require user IDs and passwords that are used to authenticate users (e.g., AAPA, page 3, lines 4-14). Therefore, the user's credentials must come from somewhere. Zhang is silent in regards to how users login to the different service providers.

In a similar art, Azuma teaches a method for accessing a service comprising an authentication proxy between a user and the service that stores first user information used to login to the intermediary and corresponding second user information used to login to the service, wherein, upon receiving the first user information, the proxy retrieves the corresponding second user information to authenticate a user with the service (column 3, line 46 – column 4, line 35).

Given the teachings of Azuma and that Zhang does not disclose how users login to the different service providers, it would have been obvious to one of ordinary skill in the art to use the apparatus as an authentication proxy, thereby enabling users to conveniently login to the service providers.

Zhang in combination with AAPA does not teach a local service center which provides users with content inside a respective private network not via Zhang's network links 156 and 160, wherein the private network includes AAPA's public switched telephone network.

Zhang's apparatus is merely router. Zhang expressly discloses how the apparatus routes outgoing transmissions (figure 7; column 5, line 62 – column 6, line 37). However, Zhang does not expressly disclose that the apparatus directly routes packets between users with the internal network addresses assigned by the apparatus (column 5, lines 56-61).

The examiner takes official notice that routing packets between users with internal network addresses was a well known routing feature and, assuming there is a reason for users connecting to the system to contact each other, it would have been obvious for the apparatus to route packets between the users, since the apparatus is itself a router.

AAPA does not expressly disclose that users accessing IP network 103 have any need to contact other users directly. The examiner takes official notice that it was well known in the art for home users to host services such as web or FTP servers in order to provide remote access to files. Given this information, it would have been obvious to do so in the instant case for the same reasons.

Regarding claim 1, the claim only substantially differs from claim 6 in that the address translation gateway (i.e., the apparatus of claim 6) translates network addresses sent from ISPs into second network addresses and sends the second network addresses to the users via the access server using a control protocol. Zhang's apparatus translates incoming communications from the ISPs in this manner (column 6, lines 29-37). The claimed control protocol reads on almost any protocol used to send packets to the user because such a protocol "controls" communication between the user and the service network.

Regarding claim 2, Zhang teaches:

a step of assigning said second network address to said user computer (column 5, lines 56-61);

a step of holding said second network address (column 5, line 62 – column 6, line 19)

a step of said network holding said first network address (column 5, line 62 – column 6, line 19).

Azuma teaches holding the user ID and issuing the authentication request. It would have been obvious to do so for the reasons discussed above.

Regarding claim 3, the user ID, first network address, and second network address are related to each other because they are stored on the same node.

Regarding claim 4, Zhang teaches that the second network address is an address described in a network address field of a communication packet (column 6, lines 29-37).

Regarding claim 5, Zhang teaches that communication between said user computer and said Internet service provider is established based on said first network address while said communication between said user computer and the apparatus is established based on said second network address (column 6, lines 20-28). It would have been obvious for communication between the user computer and the apparatus to occur via an access server as discussed above.

Regarding claim 11, the prior art does not expressly disclose use of the LCP, CHAP, and IPCP protocols. However, these were standard protocols for performing the functions taught by the prior art and as such would have been obvious in the instant case.

Regarding claim 12, Zhang further teaches that the translating part holds the private network address and the public IP network address (column 5, lines 56-61). Azuma further discloses holding

a private network user ID (column 3, line 46 – column 4, line 35) and doing so would have been obvious for the reasons discussed above.

Regarding claim 13, Zhang further teaches that the private IP network address is used to access one of the Internet service providers (column 6, lines 20-28).

Regarding claim 14, Zhang does not expressly disclose that users access a server in the network. The examiner takes official notice that it was well known in the art to access a server through an ISP to thereby access any service provided by the server (e.g., providing access to Google search). It would have been obvious to do so in the instant case for the same reasons.

Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,490,289 to Zhang et al. ("Zhang") in view of Applicant Admitted Prior Art ("AAPA"), U.S. Patent No. 6,938,158 to Azuma ("Azuma"), and U.S. Patent Application Publication No. 2002/0138737 to Schulz ("Schulz").

Zhang does not teach that the ISPs (158, 162) disconnect automatically after communication between an ISP and a user stops for a predetermined time period. However, Zhang does not teach away from doing so.

In a similar art, Schulz teaches an ISP that disconnects a user's session if the user has been idle for a timeout period (0064-0065). Schulz's timeout means would have provided advantages such as enabling service providers to maximize profits by providing access on a metered basis (Schulz, 0032). Accordingly, it would have been obvious to one of ordinary skill in the art to

automatically disconnect after communication between an ISP and a user stops for a predetermined time period for the same reasons.

Response to Arguments

Applicant's arguments filed on 21 February 2006 have been fully considered but they are not persuasive.

The amended subject matter is noted. Zhang in combination with AAPA does not expressly disclose a local service center which provides users with content inside a respective private network not via Zhang's network links 156 and 160, wherein the private network includes AAPA's public switched telephone network.

In order to meet the claim Zhang's apparatus (figure 5, 154) would merely have to route packets from one user to another without the packets being sent to networks 158 or 162.

Zhang's apparatus is merely router. Zhang expressly discloses how the apparatus routes outgoing transmissions (figure 7; column 5, line 62 – column 6, line 37). However, Zhang does not expressly disclose that the apparatus directly routes packets between users with the internal network addresses assigned by the apparatus (column 5, lines 56-61).

Users accessing each other's computers within a network hosted by the same provider was well known in the art. For example, a user accessing another user's web or FTP site or a user accessing his/her own computer for remote access reads on this limitation.

Since the apparatus taught by Zhang is itself a router, it would be obvious for the apparatus to route packets transmitted from one user to another accordingly.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip S. Scuderi whose telephone number is (571) 272-5865. The examiner can normally be reached on Monday-Friday 9:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton B. Burgess can be reached on (571) 272-3949. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GLENTON B. BURGESS
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